

Attorney Docket No.: ISPH-0537
Inventors: Dean et al.
Serial No.: 09/800,629
Filing Date: March 7, 2001
Page 2

The following listing of claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

B¹
Claim 1 (currently amended): An antisense compound 8 to 30 nucleobases in length which is targeted to nucleobases 509 through 542 of a 5'-untranslated region, a coding region, a stop codon region, or a 3'-untranslated region of murine interleukin-5 of SEQ ID NO: 1 or a 5'-untranslated region, a stop codon region, or nucleobases 2241 through 2288, nucleobases 2352 through 2371, or nucleobases 2416 through 2435 of a 3'-untranslated region of a nucleic acid molecule encoding human interleukin-5 of SEQ ID NO: 78, wherein said antisense compound specifically hybridizes with one of said regions and inhibits the expression of ~~modulates murine or human interleukin-5.~~

Claim 2 (original): The antisense compound of claim 1 which is an antisense oligonucleotide.

Claims 3 (previously canceled).

Claims 4-6 (canceled).

Claim 7 (original): The antisense compound of claim 2 which comprises at least one modified internucleoside linkage.

Attorney Docket No.: ISPH-0537
Inventors: Dean et al.
Serial No.: 09/800,629
Filing Date: March 7, 2001
Page 3

Claim 8 (original): The antisense compound of claim 7 wherein the modified internucleoside linkage of the antisense oligonucleotide is a phosphorothioate linkage.

Claim 9 (original): The antisense compound of claim 7 wherein the modified internucleoside linkage of the antisense oligonucleotide is a peptide nucleic acid.

Claim 10 (original): The antisense compound of claim 9 which comprises at least one basic amino acid conjugated to at least one end of the antisense compound.

Claim 11 (original): The antisense compound of claim 10 wherein the basic amino acid is lysine or arginine.

Claim 12 (original): The antisense compound of claim 10 which is less than 20 nucleobases in length.

Claim 13 (canceled).

Claim 14 (original): The antisense compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

Claim 15 (original): The antisense compound of claim 14 wherein the modified sugar moiety of the antisense oligonucleotide is a 2'-o-methoxyethyl sugar moiety.

Attorney Docket No.: ISPH-0537
Inventors: Dean et al.
Serial No.: 09/800,629
Filing Date: March 7, 2001
Page 4

Claim 16 (original): The antisense compound of claim 15 wherein substantially all sugar moieties of the antisense oligonucleotide are 2'-o-methoxyethyl sugar moieties.

Claim 17 (original): The antisense compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

Claim 18 (original): The antisense compound of claim 17 wherein the modified nucleobase of the antisense oligonucleotide is a 5-methylcytosine.

Claim 19 (original): The antisense compound of claim 15 wherein each 2'-o-methoxyethyl modified cytosine nucleobase of the antisense oligonucleotide is a 5-methylcytosine.

Claim 20 (original): The antisense compound of claim 1 which is a chimeric oligonucleotide.

Claim 21 (previously amended): A composition comprising the antisense compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

Claim 22 (previously amended): The composition of claim 21 further comprising a colloidal dispersion system.


Claim 23 (previously amended): The composition of claim 21 wherein the antisense compound is an antisense oligonucleotide.

Attorney Docket No.: ISPH-0537
Inventors: Dean et al.
Serial No.: 09/800,629
Filing Date: March 7, 2001
Page 5

Claims 24-27 (previously canceled).

Claims 28-48 (canceled).

Claim 49 (previously amended): A method of modulating interleukin-5 signal transduction in cells or tissues comprising contacting said cells or tissues *in vitro* with the antisense compound of claim 1 so that interleukin-5 signal transduction is modulated.

 Claim 50 (currently amended): A method of modulating the expression of human ~~or murine~~ interleukin-5 in human ~~or murine~~ cells or tissues comprising contacting said cells or tissues with the antisense compound of claim 1 so that expression of human ~~or murine~~ interleukin-5 is inhibited.

Claims 51-54 (canceled).

Claims 55-66 (previously canceled).

Claim 67 (previously amended): The composition of claim 21 further comprising the antisense compound of claims 28 and a pharmaceutically acceptable carrier or diluent.

Claims 68-72 (canceled).